

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN24LA013

EXAMINATION SUMMARY

February 13, 2024

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A. ACCIDENT

Location: Mount Sterling, IL
Date: October 13, 2023
Time: 11:30 AM CDT
16:30 UTC
Gyroplane: Mangi M24, N90HM

B. EXAMINATION SUMMARY

IIC	Andrew Finne NTSB Aurora, Colorado
Party Member	Jordan Paskevich Rotech Flight Safety Inc Vernon B.C., Canada

C. SUMMARY

An airframe and engine examination were conducted with Rotech Flight Safety in attendance at the residence of the gyroplane's owner. Examination revealed that there were no preaccident mechanical failures or malfunctions with the gyroplane that would have precluded normal operation.

D. DETAILS OF THE EXAMINATION

1.1 Cockpit

All cockpit engine controls were manipulated and had continuity to their respective engine systems. Electrical system was tested by selecting the Master Switch to on. All avionics operated normally with power applied.

1.2 Fuel/Fuel System

Fuel system was tested by adding about 1 gallon of automotive gasoline to the fuel tank and running both engine fuel pumps. Fuel line continuity was established with no leaks observed in the fuel system.

1.3 Other Systems

Rotor pitch trim actuator arm was measured and observed to be 2 inches in length from the actuator. According to the owner's mechanic this equals pitch trim of about 65 knots.

2.0 Engine Examination

Visual examination of the engine was performed prior to any testing or removal of systems. Examination showed no issues beyond a dented air intake filter and some vegetation. All four lower spark plugs were removed and examined with no issues noted. The engine was rotated by hand from the propeller to establish engine drivetrain continuity. Oil was observed leaking from the lower spark plug during rotation and is consistent with the engine being on its side for an extended length of time. The propeller was then cut to equal blade lengths just outside of the propeller hub and the engine test ran. The engine started normally, and all Engine Indication System gauges were within their normal range. The engine cockpit throttle control was then manipulated through its full range and the engine RPM correspondingly responded normally.

Submitted by:

Andrew Finne
Air Safety Investigator